California GARDEN

NOVEMBER-DECEMBER 1993 Volume 84 No. 6 $1.50

HORTICULTURAL CALENDAR

Nov. 2 ★ **SAN DIEGO FLORAL ASSOCIATION** Grapevine Basket Class
Casa del Prado Rm 102, Balboa Park. **Martha Rosenburg,** instructor. Materials furnished. 9:30-3 p.m. $25 members, $30 non-members. Make up day. Information 232-5762 or 298-5182.

Nov. 3 **SOUTH COAST BOTANIC GARDEN FOUNDATION, INC.** Holiday Wreaths
26300 Crenshaw Blvd., Palos Verdes. Demonstration by Susan Seamans using pine cones & succulents. Fee $3. Call 310/544-1948.

Nov. 4-7 **THE HUNTINGTON** Fall Plant Festival
1151 Oxford Rd., San Marino. Lecture & Plant Sale. 1-4:30 p.m. daily. Donation $5 adults; $3 children. Call 818/405-2141.

Nov. 6 **CALIFORNIA MACADAMIA SOCIETY** Annual Macadamia Field Day
Garden in Fallbrook. Call J. Harvey 728-1815 for Information, Literature and Directions.

Nov. 6-7 **RANCHO SANTA ANA BOTANIC GARDEN** Annual Plant Sale
1500 N. College Ave., Claremont. Sat. 11-4:30 p.m.; Sun. 8-12 p.m. Call 909/625-8767.

Nov. 6-7 **LAKE HODGES NATIVE PLANT CLUB, INC.** Tenth Annual Plant Sale
Vons Market, Bernardo Center Dr., Rancho Bernardo. Sat. & Sun. 9-4 p.m. Call 672-4120.

Nov. 8 & Nov.22 **SANTA BARBARA BOTANIC GARDEN** Fall Specialty Tours
1212 Mission Canyon Rd. Santa Barbara. Plants with Autumn Fruits & The Fern Collection. 12:10-12:50 p.m. each Monday. Admission $3. Call 805/682-4726.

Nov. 13-14 **SOUTH COAST BOTANIC GARDEN FOUNDATION, INC.** "Holiday in the Garden"
2630 Crenshaw Blvd., Palos Verdes. How to decorate your home & garden for holidays. Sat. & Sun. 10-4 p.m. Fee $3. Call 310/544-1948.

Nov. 21 **SUMI-E PAINTING & IKEBANA** 18th Annual Show
Casa del Prado, Rm 101, Balboa Park. Sun. 11-4 p.m.

Dec. 3-4 ★ **SAN DIEGO FLORAL ASSOCIATION** "Home for the Holidays"
Casa del Prado Rm 101, Balboa Park. Fri. 5-9 p.m.; Sat. 11-9 p.m. Information 232-5762.

Dec. 4-5 **LOS ANGELES STATE & COUNTY ARBORETUM** Camellia Show & Sale
301 N. Baldwin Ave. Arcadia. Pacific Camellia Soc. Sat. 1-4 p.m. Sun. 9-4 p.m. Call 818/821-3222.

Dec. 14 ★ **SAN DIEGO FLORAL ASSOCIATION** Bus Tour
Mission Inn Museum, Riverside and U C Riverside Botanic Garden. Information/Reservations call 232-5762. See page 184.

Dec. 14 **LOS ANGELES STATE & COUNTY ARBORETUM** "An English Country Christmas"
301 N. Baldwin Ave., Arcadia. Designer Rene Van Rems. 10-1 p.m. Reservation/Info. 818/447-8207.

Through 1994 **SAN DIEGO NATURAL HISTORY MUSEUM** Educational Programs
Balboa Park. Call 232-3821 Ext.203 for Fall/Winter Schedule of Lectures, Classes, Trips & Camp-ins.

Through Dec. '93 **SOUTHWESTERN COLLEGE/ROP** Landscape, Nursery Technology & Floral Design Classes
900 Otay Lakes Rd., Chula Vista. Call 421-6700 Ext. 5371 or 260-8388 for Fall Schedule.

Every Saturday **OFFSHOOT TOURS** One-Hour Plant Walks in Balboa Park
Meet in front of Botanical Lath House. Canceled for rain or less than 4 attendees. 1st Sat. History Walk; 2nd Sat. Palm Walk; 3rd Sat. Tree Walk; 4th Sat. Desert Walk; 5th Sat. Sample of all four tours. 10 a.m. Free. No reservations.

Weekends 1993 **SAN DIEGO NATURAL HISTORY MUSEUM** Canyoneers Outdoor Program
Free guided nature walks. Information and brochure call 232-3821 Ext. 203.

Weekly **SAN DIEGO JAPANESE FRIENDSHIP GARDEN** Docent Tours
Balboa Park by Organ Pavilion. Tues., Sat. & Sun.: 10-4 p.m. Donation. Free Tues. 232-2780.

Deadline for submission to HORTICULTURAL CALENDAR for the Jan./Feb. issue is Nov. 15.
SAN DIEGO FLORAL ASSOCIATION is not responsible for changes in information which has been submitted by the organizations.

Published by
San Diego Floral Association
for 83 Years

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Send all editorial material and change of address to:

California Garden
San Diego Floral Association
Casa del Prado, Room 105, Balboa Park
San Diego CA 92101-1619

California SINCE 1909
GARDEN
LIBRARY OF CONGRESS NO. ISSN 0008-1116

San Diego Floral Association
Casa del Prado, Balboa Park
San Diego CA 92101-1619
Monday through Friday
10 a.m. to 12 and 1 to 3 p.m.
(619) 232-5762

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NOVEMBER-DECEMBER 1993

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The cover art, "Early Paper-whites," is by our staff artist Celia Hanson. Celia may be reached at 291-8629.

OWNERSHIP STATEMENT 1993

1A. CALIFORNIA GARDEN 1B. 00084020 2. 9/30/93 3.bi-Monthly 3A. 6 3B. $7.00 4. San Diego Floral Association, Inc, Casa del Prado, Room 105, Balboa Park, San Diego, San Diego County, CA 92101-1619 5. San Diego Floral Association, Inc., Casa del Prado, Room 105, Balboa Park, San Diego, San Diego County CA 92101-1619 6. Barbara Jones, Editor, California Garden, SDFA 7. SDFA 8. None 9. Has not changed. 10. Average copies 2,630.

Single copies of the current issue of *California Garden* magazine can be purchased for a donation of $1.50 at the locations listed.

CALIFORNIA ARBORETUM FOUNDATION, INC., 447-8207, 301 North Baldwin Ave., Arcadia CA 91006
MISSION HILLS NURSERY, 295-2808, 1525 Fort Stockton Drive, San Diego CA 92103
753-7177, 442 North Rancho Santa Fe, Encinitas CA 92024
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FLOWER SHOWS: Show chairman contact *California Garden*, 232-5762 if you want the magazine sold at your show.

CALIFORNIA GARDEN (ISSN 0008-1116) is published Bi-Monthly for donations of $7.00 per year or $13.00 for two years, foreign delivery add $6.00 per year, by San Diego Floral Association, Casa del Prado, Balboa Park, San Diego CA 92101-1619. © San Diego Floral Association, 1992. All rights reserved. Second Class Postage paid at San Diego CA and additional mailing offices. POSTMASTER: Send address changes to CALIFORNIA GARDEN, Casa del Prado, Balboa Park, San Diego CA 92101-1619.

Gleanings . . .

EDITORS NOTES . . .

We thought our readers might like some suggestions for holiday gifts. The newest trendy buzzword is "a gardening lifestyle" and there are many different or improved gardening items available this year. (See page 174.)

Everyone loves potted plants and poinsettias, mums and zonal geraniums (in that order) are the most popular choices. (The traditional selling period for poinsettias is six weeks long). Records show that if a man purchases a flowering plant the color will be red. One of the most fun-gifts available is an amaryllis bulb, pot and growing medium packaged in a box. Put them together and add water and in a few weeks there is a beautiful flowering house plant.

Market analysts tell us that after age 39 people become serious gardeners. (Prior to this age most city people just do the lawn.) Apparently the biggest trend it toward growing a "salad bar" in the yard or patio. Seed gifts might be appreciated. Also, if the gardeners are inexperienced, they probably will find a subscription to **CALIFORNIA GARDEN** very helpful - particularly our section **Now is the Time** that is done seasonally by experts. (Floral sends a card to the receiver telling them who gave the gift.)

HOLIDAY DECORATIONS . . .

Decorations during the months of November and December vary with the area in which one lives. Usually the plant decorations are something that is commonly grown in the area or is native to the area. To some people the plant may be used for a significant meaning, but in America these months are just a time to be congenial and festive. The plant materials are used to be decorative and because it is a traditional plant for their family. Almost every nation, ethnic group and religion have some type of significant observance during these months. Almost everyone feels a sense of renewal with the coming of the new year. Many traditions are associated with that period.

One cannot think about November (after the Halloween decorations come down) without using mums. Many people make attractive groupings of pumpkins, gourds, dried wheat and dried corn for table decorations and for swags that are hung on the front door.

December is traditionally a month for remembering and entertaining friends and relatives and is a period when we often lavishly decorate our homes and public buildings. In San Diego, with our diversified residents, we have very interesting and different decorations. A family from New Zealand wishes that they could get "Christmas lilies." Here we call them "Easter lilies."

Almost everyone in America has a decorated tree, inside or out, of some kind or form. The custom came into popularity in the late 1800's when a picture appeared in the media of Queen Victoria and her family with a decorated pine tree. (Anything she did immediately became popular.) In the beginning, not everyone decorated pine trees and the decorations were as inventive as the finances and imagination would allow. San Diego is a delightful place to view because of the variety. Indoor "trees" can be one of the pine-type, real or artificial, a cactus, jade plant, potted plant, etc. Anything and everything is used for decorations. People decorate their houses and their outdoor trees and shrubs. Small electric lights are one of the main exterior decorations. (Some people seem to like the lights so they leave them on all year. Many find that the colored outdoor ones give a soft light that does not attract bugs or create heat in outdoor patios, gazebos and porches.) Door decorations of wreaths or swags of evergreens, chilies, hollies, ivies with brightly colored ribbons are popular and can be seen on most front doors.

Remember, don't forget to recycle your living decorations. After the holidays the trash collectors set up special area where trees can be discarded. In some areas, certain days are set for curbside pick-up. These are chipped for mulch that can be taken for home use. (See the local papers for details.)

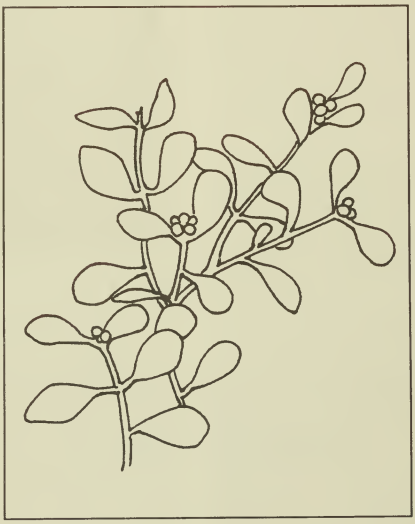
PAPERWHITE NARCISSUS . . .

The forcing of bulbs in the winter is a common practice throughout the world, particularly in the areas where there are no winter flowers. It has been done for hundreds of years and there are special containers which are used in some countries. Other bulbs can be forced, but the paperwhites are the best one to force with water. Staff artist Celia Hanson has drawn one such container with the bulbs. If you wish to start some bulbs for the holidays, it takes 5 to 6 weeks for them to bloom after water has been added to barely cover the bottom of the bulbs. (They are usually set on pebbles.) When they bloom the whole house smells wonderful. You can become addicted. (We checked some of the local nurseries and they have already sold out this year. You need to get your bulbs early. Do not put them in the refrigerator — keep them in a cool, dry place until you are ready to add the water.)

MISTLETOE

by JEANINE DE HART

NOW IS THE TIME of the year that we may think about mistletoe. After all, it's traditional as part of the holiday season celebration. It is also the time of the year that we may notice large clumps of mistletoe in stands of old oaks as we drive around the back country. While not many of us are fortunate enough to have this parasite in our yard, we won't dislike it as much if we understand its importance to birds and other critters. Why did I say "fortunate"? The only way we are apt to have mistletoe in our yard is if we have a home on undisturbed soil with old trees on it and *that* is very fortunate in Southern California.



There are three genera of mistletoe discussed in the various California floras. The genus *Viscum* is a European import (thanks to Luther Burbank) that was imported for commercial purposes. It has escaped in Sonoma and Santa Rosa counties and infected deciduous trees there.

The two native genera are dwarf mistletoe (*Arceuthobium)* and common mistletoe (*Phoradendron*). These parasites are specific as to their host plants. Mistletoe is only semi-parasitic, (hemiparasitic) as they produce some of their own food. This is why they are sometimes seen on a dead tree.

There are twelve California species of *Arceuthobium.* This group of parasites attacks conifers. Pines are the host of most of this group, but one, *A. douglasii* is parasitic on Douglas fir. This impacts the timber industry as the Douglas fir (*Pseudotsuga menziesii)* is considered to be the "premier industrial tree of the world."[1] This genus of mistletoe causes the most serious loss in the timber industry as stands heavily infected produce less and poorer quality as well.

Many of the *Arceuthobium* are found only in the northern part of our state or in the higher peaks of our Southern California mountains. In the Lagunas and Cuyamacas we might see *A. campylopodum* whose hosts are Jeffrey pine, ponderosa pine and Coulter pine.

The other genus of mistletoe is *Phoradendron,* meaning "tree thief"[2]. Some of the seven species in this genus are probably more familiar to most of us. The desert mistletoe (*P. californicum)* is parasitic on members of the pea family (*Fabaceae),* such as mesquite, palo verde, catclaw acacia and ironwood. We only have to go as far as the Anza Borrego Desert to see these plants and the parasite.

The big-leaf mistletoe *(P. macrophyllum)* is found on many of our native deciduous trees such as alder, ash, walnut, sycamore, poplar, mesquite, locust and willows. Probably the most important in this genus is the oak mistletoe (*P. villosum).* It's found on all the oaks and sometimes on plants growing in oak woodlands with the oaks. This would include chamise, manzanita, sumacs and California bay. While mistletoe might stress the oaks, it is not usually fatal to the tree.

American Indians of California believed that the life-spirit of the tree retreated into the mistletoe when the tree lost its leaves. The Druids of Europe held similar beliefs and worshipped the deciduous oaks. The Druids held religious ceremonies in the oak forests and may have used the berries in their magic rituals.

Early in our history, mistletoe berries were considered useful for a wide range of ailments which included tuberculosis and epilepsy. We now know that all parts of the plants, including the berries, are poisonous.

The poison is due to the chemical properties of the mistletoe. The chemical's names and properties are beyond the scope of this article. The chemical involved is one of the differences used in separating the plant into different genera. Another difference is the method of dispersal. *Arceuthobium* is spread by the explosion (dehiscing) of the ripe berries. The seed shoot as far as 50 feet and at an initial velocity of about 60 MPH. The fruit of all mistletoe is quite sticky and able to adhere to the branch on which it lands.

The seed of *Phoradendron* are spread by bluebirds and phainopeplas. They use the berries as a food source and spread the seed from oak to oak in their droppings. Another item of importance here is that mule deer feed on the mistletoe in the winter time when browse is scarce. The mistletoe is an important source of protein.

(continued next page)

SAVING YOUR HOLIDAY POINSETTIAS

by ROBERT D. HORWITZ

IN 1920, PAUL ECKE SR. developed the first poinsettia cultivar that could be successfully grown as an indoor potted plant. He hastened to introduce the method to flower growers all across the country. The poinsettia (*Euphorbia pulcherrima*) is treated to conditions in growing houses to cause them to bloom during the holiday season. To prolong the life of colorful bracts which surround the real flower, which is that insignificant little yellow thing in the middle of all the red color, you should place the plant near a bright-light window, with plenty of sun. Keep the soil moist, but not saturated and the color will last.

But, when the color fades and the leaves start to fall, it is time to reduce watering significantly. Put the plant in a cool place until the new growing season starts in spring. Cut the stems back severely, leaving only a few buds. When new growth starts, take the plant outside so that it can get plenty of sunshine. A little fertilizer wouldn't hurt at this time. If the plant gets too leggy, prune it back to the shape you want. In the fall, take the plant into an area where it will get about twelve to fourteen hours of darkness each day so that it will be forced into blooming again for the holidays.

If you decide that you prefer to have the plant as an outdoor specimen, it can be planted in the ground in a place so that it will get plenty of sun in the summer and lots of shade in the autumn. It is not particular about soils, and all it asks is enough water. It can grow quite leggy in the ground, so pruning may become necessary to keep it within bounds. There are many of them in my neighborhood that put on their display in December as regular as clockwork.

You might take some of the pruned canes and pot them so that a node or two is under the soil. To improve chances of its growing, apply rooting hormones before sticking the canes into the ground. If you do this in early summer, there probably will be sufficient growth so that in the fall you can give them the darkness treatment to get December blooms to bring into the house and for gifts.

There are other colors of poinsettias, but the red ones are by far the most popular. A word of caution; when pruning, wear gloves and try not to get any of the sap on your hands, face and particularly the eyes, as it is somewhat caustic. □

ROBERT D. HORWITZ is a retired aerospace engineer and a regular contributor to local publications.

MISTLETOE (continued)

The flowers of most of the California mistletoes are dioecious, meaning that the male and female flowers are found on different plants. The wind may blow the pollen a distance where it alights on a receptive stigma.

The next time you are hiking and see a dying tree full of mistletoe, think of the life the mistletoe has supported, the tenacity of the plant and accept this as more of Mother Nature's grand plan. □

JEANINE DE HART managed the former Weber's Nursery specializing in native plants and now does consulting and contract growing of native species.

Botanical nomenclature for the host plants:

Jeffrey pine (*Pinus jeffreyi*), ponderosa pine (*P. ponderosa*), Coulter pine (*P. coulteri*), mesquite (*Prosopis species*), palo verde (*Cercidium sp.*), catclaw acacia (*Acacia greggii*), ironwood (*Olneya tesota*), alder (*Alnus sp.*), ash (*Fraxinus sp.*), walnut (*Juglans sp.*), sycamore (*Platanus racemosa*), poplar (*Populus sp.*), locust (*Robina sp.*), willow (*Salix sp.*), chamise (*Adenostoma fasciculatum*), manzanita (*Arctostaphylos sp.*), sumacs (*Rhus sp.*), California bay (*Umbellularia californica*).

References:

[1]Donald Culross Peattie, *A Natural History of Western Trees*, 1953

[2]Department of Agriculture, *Plant Diseases*, 1953

Fuller, T. C. & E. McClintock. *Poisonous Plants of California*, 1986.

Hylton, William H. & Kowalchik, Claire, editors. *Rodale's Illustrated Encyclopedia of Herbs*.

Pavlik, Bruce M., Pamela C. Muick, Sharon Johnson, & Marjorie Popper. *Oaks of California*, 1991.

Roberts, Norman. *Baja California Plant Field Guide*, 1989.

Mistletoe sketch by Mary Jane Lindley.

Linda Kadebec and Paul Goodman transformed their yard in University Heights

FROM ZEROSCAPE TO XERISCAPE

by LINDA KADUBEC

WE REALLY WANTED a flower garden, but our sloping five hundred square foot yard barely grew weeds and two pyracantha bushes. The neighbors warned us, "nothing will grow here," but it feels like a paradise to us now.

The garden did not come about through luck or with the help of a professional designer. It took forethought and hard work. We both dug with a pickax, shovel and crowbar. We removed hundreds of rocks (some two feet long) and poor soil with solid veins of clay by the bucketful. I dug down twenty inches, two to four hours most days, for months, working off some old frustrations. Paul dug on weekends.

We unearthed four pipes: the sewer, two water and one gas line. We had to fill in our trenches next to the sidewalk every evening so that no one would fall in.

As we dug, we amended the remaining soil with gypsum (15 pounds per 100 square feet) and granulated soil sulphur (10 pounds per 100 feet). We had to mix everything again when we brought in 6 cubic yards of 50 percent steer manure and 50 percent wood chips.

Through my landscape construction class (Continuing Education Program on the Mesa College campus) I analyzed my loam soil and found it to be 63 percent sand, 23 percent silt and 13 percent clay, with a slightly acid pH.

The developing garden turned out to be a great "community project." School children and parents walking to and from school kept tabs on our progress They asked why we were digging so deeply and if we were going to plant grass. Well, grass was the last thing we wanted to plant — grass meant mowing and edging at least once a week and we had an easier garden in mind — a xeriscape.

THE DESIGN

After digging and hauling through the day, my evenings were spent on planting ideas and the design. We wanted an English garden feeling, incorporating softness, fragrance and a loose style — not hard-edged or exact.

It took four months to make the design. We knew we wanted a drought tolerant garden. First, we each made a wish list of our favorite plants. Reading magazine and newspaper articles and books opened a new world for us, introducing us to salvias, gazanias, rockroses and more. We had to discard a few desired flowers that were water greedy, but added many that were new to us and water thrifty.

I planned and replanned on graph paper, trying to incorporate flowering plants for each season. It was worth it. As the seasons progress, you can enjoy one after the other: freesias, daffodils, Dutch iris, Mexican bush sage, bearded iris and coreopsis. Fragrant plants are within arm's reach, so you can pinch scented lemon verbena or rosemary. The purple pansies look nice near the grey snow-in-summer. The upright spikey leaves of dark bronze New Zealand flax complement the oval leaves of the schefflera. Most of the plants are perennials with a splash of annuals; and we used spring bulbs, rhizomes, even some shrubs and ground covers.

Later we planted the curb area with plume celosia, gloriosa daisy, pincushion, zinnias and Oriental poppies. All were very showy summer through fall. (Editor's note: Oriental poppies ordinarily do not repeat bloom here,

apparently finding the weather too mild.) We hid the drip line to them in the expansion crack in the sidewalk.

In December, after informally laying out about five-hundred dollars worth of two inch, four inch and one gallon potted plants, we planted them. Then we laid a quarter-inch drip line, pushed on the emitters and covered it with free mulch from the City of San Diego landfill.

We sat back and watched our garden grow. We were told that smaller plants would grow quickly and catch-up with larger plants, and it was true. The plants grew by leaps and bounds. By March passersby stopped and stared — they couldn't believe the hundreds of flowers and the beautiful fragrances. There were red roses, yellow yarrow, purple statice, and hardenbergia, callas, petunias, geraniums, lavender, spikes of liatris and delphinium. "How did the plants get watered?" people asked. They never saw us standing with a hose. The secret was the hidden drip irrigation system that runs twenty minutes, twice a week.

To figure out the irrigation system we read articles and booklets. We decided on ¾-inch PVC, a Champion anti-siphon valve, Rainbird 4-station dual program timer, Pepco parts, including 4-outlet bubblers, ¼-inch microtubing and laser-cut lines. It was especially helpful to put in a "slip" elbow under the bubblers, so that if anyone accidently stepped on one, the elbow would bend to one side, eliminating pipe breakage. Our fears of laying a drip system vanished once we started because it was straightforward and not as difficult as we thought.

HINDSIGHT

In looking back I wish we had not used Mexican evening primrose in the front yard. It has spread runners 10 feet in every direction, even though I've dug them out four times. When they stop flowering, I'll dig them out again.

We were a bit disappointed in the rockrose because its blooming season was short. One of the irises given to us by a friend spread almost three feet across in one season, so that has been removed. Irises that we've ordered from Schreiner's have been successful. 'Blue Staccato' bloomed three times in one season. 'Sunday Punch,' 'Cloud Fire,' 'Instigator,' 'Blue Sapphire' and 'Cotton Carnival' stayed compact and bloomed beautifully.

There is no accounting for the fact that one of the white marguerites died almost immediately, while the other is now four feet tall and wide. It needs to be trimmed again so we can get to our front porch.

The whole project was certainly worthwhile; it gives us and the neighbors pleasure every day. Ours is the only yard like it in this neighborhood. People honk their horns and give us a thumbs up sign as they drive by the billowing flowers. And they said nothing would grow. □

LINDA KADUBEC has lived in San Diego since 1959 and has been gardening since 1985. She is now working on an AA degree in Mesa College's Nursery and Landscape Technology program. This garden is located at 2527 Meade Avenue.

Photographs by Betty Newton.

PREHISTORIC PLANTS

by BARBARA S. JONES

THE BOOK AND MOVIE *Jurassic Park* has kindled nationwide interest in long-ago animals and plants. In San Diego we always knew that there were plants that had existed millions of years ago that still grew easily in our area. The plants that exist today, may not be the exact same species, but they are the same genus and probably look much as they did in prehistoric times.

In grammar school, when we studied prehistoric times, we were encouraged to view the "cycad palms" that grew in the center of the lawn in front of the courthouse on Broadway. (Neither the courthouse nor the cycads are there today.) These plants were probably *Cycas revoluta*, today called "sago-palm." It is a cone-bearing plant distantly related to conifers, not palms. It is an attractive, slow growing plant. The 2-3 ft. long, feather-like leaves grow out in rosettes from a single trunk. It is an easy plant to grow and can withstand temperatures down to 15°F. It will tolerate patio or indoor container growing. It needs an average amount of water but good drainage, and should have partial shade (except near the coast.) The sago-palm has become a popular landscaping plant. Beautiful specimens can be seen in the patio of Casa del Prado and at the eastern corner of the art gallery in Balboa Park. This plant appeared about 250 million years ago and other cycad species are still found in Florida, South America, Philippine Islands, Australia, Asia and South Africa.

Horsetails (*Equisetum sp.*) did not become popular garden plants in San Diego until the 1950's. Ikebana helped to popularize this plant that was not for sale at florists. It is often used for landscape-type arrangements. (Flower arrangers are always growing special plant material for their art.) Horsetail species soon became available, and San Diegans realized what an attractive plant it was growing around a garden pool. Horsetails appeared about 300 million years ago. These hollow-stemmed, reed-like, green plants love wet soil and will grow in the shallow water of ponds. They will aggressively spread throughout the garden. Leaves are inconspicuous and spores are produced in cone-like structures at the tip of the plant. They can be grown in container water gardens, too.

Plants that produced cones came into existence over 150 million years ago. A tree of that period that is popular in San Diego is the ginkgo (*Ginkgo biloba)*, commonly call maidenhair-tree because the leaves are shaped like maidenhair fern. For years it was thought that the plant was extinct, but early in this century trees were found in a remote monastery in China. Since then this attractive, deciduous tree has been widely grown throughout the world. It is a slow growing tree that does well in lawns or as a street tree. The size can be controlled by pruning. In the fall, the leaves turn a lovely yellow before falling. The seeds are edible and, in Japan, are considered a delicacy when cooked in a non-sweet, custard-type dish. Unfortunately, the female tree produces a large amount of ill-smelling, fleshy fruit, that makes a terrible mess when it falls. Usually only male trees are sold.

Other prehistoric trees that are popular in San Diego gardens are the araucarias, monkey puzzle trees. They are easily recognized by their silhouette of evenly-spaced branches of stiff leaves. This slow-growing tree does well in a wide range of soils. Norfolk Island pine *(Araucaria heterophylla*) is commonly grown as a potted "christmas tree." The most famous specimen is to be found on the grounds of the Hotel del Coronado. This is thought to be the first outdoor tree in the world to be decorated with electric lights at Christmas. (In 1914, Thomas Edison came to San Diego and installed "fairy lights" in the shrubbery for the 1915 World's Fair. The lights were used to simulate fireflies.)

Ferns predominate in fossil records. They lived in damp areas, much as ferns do today. The Australian tree fern and New Zealand tree fern, commonly grown in today's gardens, are similar to the tree ferns that existed over 300 million years ago. Ferns were the first plants to have recognizable leaves, but they reproduce from one-celled spores.

Flowering plants did not develop until about 115 million years ago. One of the earliest flowering plants was the sycamore. We still find this plant growing wild in our local canyons. It is a deciduous tree and the leaves turn a brilliant yellow in the fall.

Of course, you, the reader, realize that all of the dates are approximate. These are only a few of the plants that grow in the San Diego area that are directly descended from prehistoric plants. Think how you will amaze the children clutching their toy dinosaurs when you point out plants that were eaten (or at least sat-under) by real dinosaurs. Incidentally, the book *Jurassic Park* was set in Costa Rica, but the film was made on Kauai. □

BARBARA JONES studied botany at Hoover High School with Dr. Edith Purer and at SDSU with Dr. Dorothy Harvey. Balboa Park and the zoo were often used as classrooms.

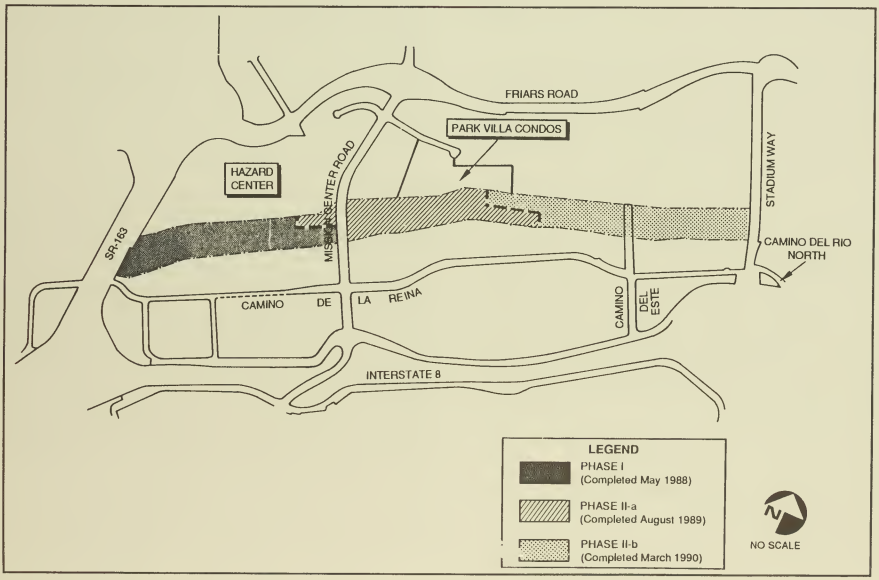
REDISCOVERING THE SAN DIEGO RIVER

by BRAD BURKHART

A REMARKABLE OPPORTUNITY has become available to San Diegans during the last five years. Traditionally, the San Diego River has been inaccessible to most of the people living here. Only those brave enough to fight their way through thickets of native willow, cottonwood, and old tires have had the pleasure of seeing this great river flowing through the heart of their community, even though it passes right behind some of the busiest shopping and hotel areas in the city. All this has changed, thanks to a group of landowners in Mission Valley wishing to protect their lands from flooding and to a unique national wetland law that requires preserving all native wetlands - the Clean Water Act of 1972.

Today one can drive into a small parking lot off the northeast corner of Mission Center Road and Hazard Center Drive, park the car and walk down a sidewalk that passes along both sides of nearly a mile of the river. From the walkway one sees swooping tree swallows gather insects over the river's surface and ruddy ducks panning its depths for their invertebrate prey. Warbling sounds emanate from tangled clumps of quick growing willow and grape along the river's edge as precious yellow warblers champion their new fledglings or marsh wrens rumble in the cat-tails as they tend their nest. All this time, young oaks pursue their steady progress toward eventual domination of the upper banks. This is the First San Diego River Improvement Project or FSDRIP for short.

FSDRIP construction was completed from 1978 to 1988 after nearly 10 years of negotiations and planning among landowners, the City, and both federal and state natural resource agencies mandated to preserve native wetlands. Its planning was a tough give-and-take process between those who wanted to preserve the native wetlands and those who wanted to benefit from development of the flood plain. The project was begun in the early 60's when most citizens viewed rivers more as a menace to be controlled than a treasure to be protected. However, planning was completed in the early 70's when the nation came to realize that wetlands were a precious heritage about to be lost unless protected. What began as a project to tame the San Diego River by containing it in a giant concrete trough, ended as a project to restore the river to its full glory.



When FSDRIP was begun, nothing like it had been attempted before. Over a mile (fifty acres) of river channel would be completely rebuilt and subsequently replanted with native species. A special design group composed of biologists, hydrologists, landscape architects, engineers, and planners labored for months to devise the plan and finalize construction documents. When they finished, it took nearly two years of grading and planting to install the project. Fourteen-thousand native trees and shrubs were contract grown for project planting. Four different seed mixes were collected and applied to recreate native understory cover. Many of these species had never been grown before. Finally, an elaborate irrigation system was implemented that could water either trees and shrubs separately or the entire project all at once.

To pay for FSDRIP, a special tax assessment district was established for all owners who would benefit directly from the project. A special board composed of owners, and resource agency representatives and City officials was set up to assure successful establishment. A local environmental firm was hired to supervise installation and maintenance as well as collect data on the development of the project. Monitoring was specified to continue for five years after installation to determine whether the success standards for growth and cover set for each year in the project permit were being met. A special pamphlet was produced by the City to explain the project to the public. The pamphlet was distributed to residents who lived along the project's margins. San Diego waited and watched, at first disturbed by the enormous destruction wrought to the flood plain by early project grading, then slowly delighted as the bare earth and weeds began to be overtaken by a lush riparian cover.

The year 1993 marks the end of five years of post-construction monitoring of the restoration. During this period, the site has been literally transformed from a place that no one dared enter to one that now invites restful walks and contemplation. Huge housing projects now rise along the projects edges and celebrate the rivers presence through names like "Riverfront" and "River Scene." New rare species of birds like least bitten, blue grosbeak, and tricolored blackbird wander into the project each year to make it their home.

San Diego has created a new and healthy relationship with its river, which promises to last even as development continues to expand in the valley. New projects planned up and down stream now have designs on their drawing boards to restore the river. Golf courses are slated for conversion to a new riparian habitat and a new light rail transit system is planned that will slip along the rivers restored edge allowing previously unprecedented views over the water. Yet the effect is subtle, and many who pass the site today would swear it had been there undisturbed for eternity. What was once an eyesore has now become a jewel of civic pride and a symbol of what man can achieve if he lives in closer harmony with nature. □

BRAD BURKHART is the director of the Habitat and Management Group of Ogden Environmental and Energy Services Co., Inc. Pictures and sketch by author.

MILTON SESSIONS

by LUCY WARREN

SAN DIEGO GARDENERS and garden appreciators owe a lot to Milton Sessions. This handsome young-at-heart gentleman of 92 years was among a group of early horticulturists who helped to shape the botanical landscape that we still enjoy today.

The Sessions family were devoted plantspeople. Milton joined his father and aunt in his love for plants. Kate O. Sessions was responsible for popularizing many plants, including beautiful native plants, which thrive in our Mediterranean climate. Frank, Milton's father, was well known for his poinsettias and honed his skills at moving fully grown trees that greatly enhanced the two expositions held in Balboa Park.

Milton Sessions formed a close professional and personal bond with the noted architect Richard Requa. Together they enabled San Diegans to envision the great gardens of Europe and interpret them for homeowners and businesses in San Diego. Many of these fine buildings still grace San Diego. Mature trees are testimony to foresight in the original landscape design.

Long time San Diego residents may even remember Milton Sessions' nursery and florist shop in Old Town. Now part of Old Town Historical State Park, it was designed by Requa and completed in 1929. It purposefully reflects classical Spanish design.

Milton was hired by Edsel Ford to landscape the Ford building (now the Aerospace Museum) for the 1935 exposition. If you look in the courtyard you will see that the fountain forms a large V-8. The hillside behind the building was transformed into the "Roads of the Pacific." Milton recreated segments of the major roadways of the Pacific Rim with roadbeds and vegetation typical of the countries represented. Fairgoers were able to experience international travel in the new Ford V-8 cars!

In recognition of his early contributions to horticulture in San Diego, Cuyamaca College honored Milton Sessions as "Horticulturist of the Year" at their April 15, 1993, awards banquet. On March 7, 1993, Mr. Sessions was recognized with a feather duster palm (*Rhopalostylis sapida*) planted in his honor at the San Diego Zoo. It joins another tree in the Zoo planted by his aunt, Kate Sessions, on the first San Diego Arbor Day, March 7, 1903. Milton Sessions was the Official Host of the Flower Show at the 1993 Del Mar Fair. Mr. Sessions delightful humor enlivens our interest in San Diego's botanical heritage. □

LUCY WARREN is a garden writer with a keen interest in historical gardens.

"JELLY PALM" JELLY

by BARRY L. OSBORNE

FOR MANY YEARS, as the three *Butia capitata* palms by our front walk would begin to drop their apricot-pineapple-scented fruit, my wife and I would remark to each other that this year we simply *must* find out how to make palm jelly. We had heard rumors that somebody-or-other's cousin's great-aunt knew how to do it, but we'd never been able to track down a recipe. Finally, this year we decided to try to figure it out for ourselves.

The first obstacle was ants. The moment the juicy orange fruit is ripe, it falls to the ground,and while an insect embedded in amber is a delightful object d'art, an insect in jelly is definitely not. The problem was overcome by enclosing the whole infructescence in a plastic trash bag, then using Tree Tanglefoot™ goop on the penduncle to stop the ants from marching down the stalk. (Keep an eye on the critters: they'll try to bridge the Tanglefoot with grains of sand.)

When the bag was heavily laden with fruit, we removed any bits of debris, transferred the fruit to a large cooking pot, mashed it with a potato masher, then poured the juice into quart jars through a fine tea strainer. An instruction sheet accompanied the package of pectin (We used MCP brand powder.) and we decided to follow the recipe given for loquat jelly.

Putting a quart of juice in a large saucepot, we added ½ cup of lemon juice and the package of pectin, then brought the mixture to a rolling boil, stirring constantly to prevent scorching. We then stirred in 5½ cups of sugar, and brought it to a rolling boil again, this time maintaining the boil for two minutes. We skimmed off a bit of foam, then poured the mixture into jars, to within ⅛ inch of the top.

The result, when cool, was a delicious jelly, which has proved to be quite popular as gifts for our friends and relatives.

I should mention that there are several species and varieties of *Butia* palms in California. While fruit from any of these would probably be adequate, the type we used was the particularly juicy, 1⅛ inch diameter orange fruit, rather than the smaller, pale yellow fruit sometimes seen. □

BARRY L. OSBORNE is a foreign language teacher, who has returned from his travels with many seeds and cuttings. His spectacular garden in Santa Barbara is a favorite for visits by garden groups.

THE STORY OF RHUBARB

by CHUCK MCGILL

RHUBARB IS A PERENNIAL vegetable that is low in calories and a source of vitamins A and C, potassium and calcium. Although it is a vegetable, rhubarb is treated like a fruit. It is used in pies, jellies, jams and sauces, either alone or in combination with other fruits.

Rhubarb can be traced back to 2700 B.C. in China, where it was used for medicinal purposes. From China, rhubarb was exported to Russia and then Europe, where it became popular. Despite its desirable characteristics, rhubarb did not become a part of the world diet until the 1800's.

Most of us know of Ben Franklin's contributions to his young country as a statesman, inventor and printer. However, Franklin was a great lover of rhubarb. Yes, rhubarb! In 1770, the first known rhubarb plant in the U. S. was shipped by Ben Franklin from London to his friend John Bartam in Philadelphia. That this contribution of Franklin's to his country was forgotten during our Bicentennial celebration in 1976 so upset our rhubarb lovers that they set aside a day each year to remember that special intercontinental exchange, responsible, in part, for the tasty desserts, delicious pies, mouth watering jams and the wonderful ham sauces. Most credit should go to the cooks who keep finding new ways to make rhubarb more enjoyable.

In the United States we celebrate International Rhubarb Day on April 6th. Usually, the first crop of rhubarb is ready for picking in most parts of the country on this day when spring is just around the corner. Eighty-seven percent of the total U.S. crop is produced March through June. Locally grown production is October through June, with continued production through July, depending on weather conditions. The 'Cherry' variety has a reddish color and is less tart, less stringy and tenderer than other varieties. We enjoy the sauce with turkey and dressing at Thanksgiving and pouring champagne and delightful rhubarb wine for our New Year's Eve toast.

HOW TO PLANT AND GROW

Plant rhubarb in late winter or very early spring. It can be grown almost anywhere in the U.S., except in the driest and hottest regions. In most home gardens, rhubarb will yield each spring for ten or twelve years, even when completely neglected.

Because you will not be replanting and renewing the soil around the root for several years, you should carefully prepare the soil for the new root sections. Good soil with adequate drainage is important to the success of your plants.

Rhubarb is usually propagated by root division, which is quicker and more reliable than planting seed. To maintain quality and quantity of stalks, divide the stalks every eight years, even though they will continue producing without being divided. The best time to divide them is after they have stopped producing, preferably during the dormant season in your region.

Dig root clumps and use an ax or sharp shovel to cut each clump into sections. Discard the older center part. Be sure that each part you are planting has a bud or "eye" in each section and as many feeder roots as possible. For extra protection, dust the cut pieces with a fungicide before replanting.

Planting holes should be dug in an area that is well-cultivated in a coarse soil with a mixture of compost or peat moss blended with well-rotted manure. (Never use fresh manure.) Cover this mixture with good topsoil and place the root section on top; spread out the feeder roots. Now cover the exposed roots with the remaining topsoil until there are not more than two inches of soil above the red buds on the clump. Then protect the plant with a new layer of mulch.

HOW TO HARVEST

During the first year of growth do not harvest stalks from new plants because the roots still need to be nourished without interruption. In the second year of growth, remove only the largest stalks. Afterward, you may liberally harvest the stalks, although at least a quarter of them should be left on the plant after each picking. Promptly remove all flowering stalks that develop.

Harvest stalks by grasping near the base and pulling downward and outward . . . do not cut them. Grip each outer stalk firmly and pull downward with a twisting motion so that the stalk pulls off cleanly.

Crown rot will develop if any stumps are left above the ground. When trimming the leaves, always leave a "crow's-foot" of leaf an inch or two long, so that the rhubarb will stay fresh longer. **Since the leaves are toxic, only the stalks should be eaten.**

Once planted, rhubarb requires little care, but it is a heavy feeder, requiring compost or manure in the fall, late spring and summer. Rhubarb prefers a moist, but well-drained acid soil, rich in organic matter. Full sunlight is not required.

(Continued on Page 179)

GIFTS

GIFTS FOR THE FLOWER ARRANGER

Flowers, vases, scissors, mechanics: these are gifts guaranteed to excite the flower arranger. The important point to remember when selecting one of these is to fit the gift to the arranger. Just as you consider the receiver's style when choosing gift clothing, you need to do the same thing when selecting flowers and accessories. The result will be a very pleased arranger who continues to use your gift.

Vases are plentiful and can be a good buy if you find a suitable one in a retail store, a secondhand store or a garage sale. You should look for one in the best condition. Consider the recipient's living environment. Is it rustic, casual, contemporary, elegant, matching, eclectic? If you don't know the home environment, think about their choice of clothing in similar terms. Possibly you know the kind of arrangements the recipient enjoys making. Then choose a container that reflects that style.

Color is usually the most dominant aspect of a flower vase. A wise color choice for a gift vase is a neutral earthtone, neither white nor black, but a soft beige, tan or brown with minimal pattern. The flower arranger values texture more than surface applied color. Pastel colors are a good second choice. Clear glass versus tinted is also considered neutral.

Strive for harmony in color and shape. An understated look is preferable because eventually the container will play a supporting role to the beautiful flowers that will fill it. Happy shopping!

Susan Fox

GARDEN-RELATED BOOKS

Sunflowers are this year's floral and fashion craze, according to Angela Lau, in a *San Diego Union-Tribune* article. Perhaps this popularity can be attributed in part to the well-liked book, *Sunflower Houses: Garden Discoveries for Children of All Ages* by Sharon Lovejoy (Interweave Press, Loveland, Colo. 1991). The title comes from the author's idea of building a playhouse of tall sunflowers, interplanted with morning glories. The open center between sunflowers is crisscrossed with string for the morning glories to twine on to make a roof.

Among the many projects described is one of making crowns of yerba buena (*Satureja douglasii*) to ward off mosquitos. Still available, this book could be a welcome gift for all generations.

Jacqueline Coleman

For followers of Celia Grant's adventures, as she landscapes, propagates and solves murder mysteries, Charles Scribner's Sons expects to bring out a new book in December, *Creeping Jennie*, by John Sherwood.

Jacqueline Coleman

GARDEN HOSES

Garden hoses make welcome gifts. They are made in many sizes, lengths, kinds, and materials. The most common material is vinyl, but they are made of rubber, rubber-vinyl, and nylon. The most popular size is 50 feet long and ⅝" in diameter.

Soaker hoses are made of a spongy material that allows water to ooze out along the full length of the hose. With this hose, water can be slowly delivered directly beneath the hose and a few inches on each side. Soaker hoses have been popular for years, but the older varieties were made of fabric. Soaker hoses are useful for areas that are difficult to water (on slopes or ledges), where deep watering is needed but the soil is slow to accept water (water runs off before it penetrates), and when heavy winds or heat will disperse water before it reaches the desired surface.

Many sprinkler hoses look like a long flat ribbon but round ones are available. There are tiny holes on one side that allow water to sprinkle up and out (up to a foot). Sprinkler hoses are very useful for places that are difficult to water. They are easy to handle and can be easily rolled and picked up when not is use. One that has a clamp on the end so it can be flushed out is excellent for our area where the minerals in the water often clog the tiny holes.

Both soaker and sprinkler hoses should not be used when the faucet delivering the water is a long distance from the area to be watered. A regular hose should be connected to the faucet and the specialty hose attached in the area where it is to be used.

Gardeners are becoming more conscientious about water usage and are trying to deliver the correct number of inches of water for their plants. There are inexpensive measuring devices that can be attached between the faucet and the hose. These can be set to deliver a specific amount of water.

There are new devices to easily attach the hose to the faucet or the sprinkler to the hose. □

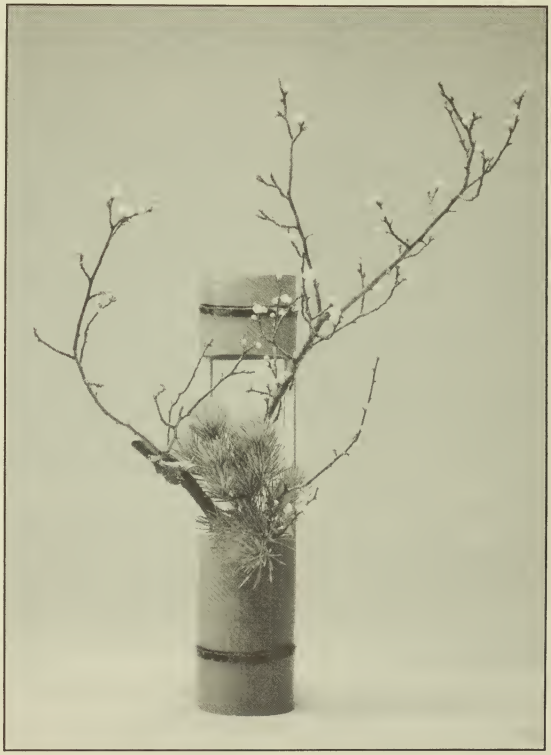
Barbara S. Jones

IKEBANA INSIGHTS

HOLIDAY ARRANGEMENTS

by SUSAN FOX

ONE OF THE MOST IMPORTANT holidays in Japan is January first, New Year's Day. Special games are played, special poems are composed and special flower arrangements decorate homes and commercial establishments. The traditional New Year's colors are green, red and white, identical to our Western traditional colors. However, traditional Japanese arrangements omit our usual additional gold and silver glitter, ribbons and ornaments. They concentrate on expressing the three colors with the flower container and foliage and flower material.



Ikebana arrangers are firmly attached to the concept of expressing the season through natural materials. Materials found in the garden in December play a major part in the usually elegant and simple arrangements. Pine, familiar to Western arrangers as holiday material, forms the basis of an oriental style arrangement. It signifies long life since it is evergreen, and is one of the most important ingredients in the arrangement. Bamboo, or Japanese apricot (our flowering plum tree) can be used as major materials, also. Bamboo signifies strength in adversity and apricot the idea of rebirth.

Flowering materials used at this time of year are rather restrained. Often camellias appear in the arrangement, but the varieties used are single, white and small. The goal is to portray a quiet beauty, dignified and strong. The color white should remind the viewer of snow and winter conditions. Angular branches echo the cold lonely feeling of winter landscape. The small white blossoms of narcissus, Japanese apricot, cymbidium or chrysanthemum suggest rebirth and the certainty of nature's cycle. Red nandina berries provide a note of gaiety. Fruits such as kumquat, and Buddha's hand orange (a type of citron) provide a bright touch and a perfect color contrast to the green of pine branches.

These different traditions make us aware of expanded possibilities for our own holiday flower arrangements. Most of these materials are available in San Diego, many in our own or a friend's garden. Give these new combinations a try. You will increase your knowledge of flower material and encourage your friends to look at common materials in a new way.□

SUSAN FOX does flower arranging in both western and oriental styles. She has studied Ohara Ikebana for over 11 years.

Now is the Time . . .

A CULTURAL CALENDAR OF CARE FROM OUR AFFILIATES
Compiled by Penny Bunker

AFRICAN VIOLETS
Helen La Gamma

NOW IS THE TIME

TO PREVENT extreme differences between night and day temperatures.

TO KEEP the plants well groomed and repot those that have outgrown their pots. A good rule - the pot should be 1⅓ times the diameter of the leaf span.

TO CONTINUE to have good circulation of air around the plants.

TO PROVIDE adequate humidity; monitor the temperature carefully.

TO PLAN on using your plants with holiday decorations; plant in containers to match color scheme.

BEGONIAS
Margaret Lee

NOW IS THE TIME

TO CLEAN up all debris - remove dead leaves and spent blooms.

TO WATER as needed.

TO PUT a top dressing of your favorite mulch around plants to replace any soil or mulch washed away by fall rains.

TO GIVE a light feeding several times a month to help the plants withstand any adverse conditions a little better.

TO SPRAY for mildew control.

TO ALLOW tuberous begonias to die back on their own; put aside and let rest, but sprinkle occasionally.

TO BE vigilant for insects; spray for mealybugs and other pests.

BONSAI
Dr. Herbert Markowitz

NOW IS THE TIME

TO REDUCE watering, but watch dormant trees; they need more water but not too wet.

TO MOVE plants into shade if a hot spell occurs. Avoid a second growth period during this time - it will weaken the trees.

TO REFRAIN from fertilizing or transplanting at this time.

TO KEEP deciduous trees protected from sudden changes of temperature.

TO REMOVE any old leaves, fruit or seeds from deciduous trees.

TO PRUNE black pines by cutting the candles about half length.

TO GRAFT conifers in December.

BROMELIADS
Mary Siemers

NOW IS THE TIME

TO STOP fertilizing during fall and winter months, except those that are kept in a greenhouse.

TO REDUCE the frequency of watering when weather turns cooler.

TO PROTECT your plants from hail damage during the rainy season by providing overhead protection such as shadecloth that will allow plenty of light.

TO PROTECT plants from freezing temperatures by covering with sheets or newspaper.

TO KEEP plants clean by cutting spent blooms and dead leaves with scissors.

TO SPACE plants apart to allow air circulation. This helps to prevent scale.

CACTI & SUCCULENTS
Joseph A. Betzler

NOW IS THE TIME

TO WATCH your plants. Most cacti and succulents have a dormancy period. With the strange weather pattern this year, many winter growers may start early growing.

TO FERTILIZE the plants that are actively growing.

TO WATER only in the morning on a day that is going to be warm. By doing this, no standing water will be on plants in the evening.

TO PROTECT tender plants from excessive cold and winter rains. Repair cracks and leaks in shelters before the rains arrive.

TO KEEP ants under control; they transport aphids and mealybugs.

TO REMEMBER that when plants become too cold during the cold evenings the growth of fungi and bacteria can be fostered.

TO START looking for winter growing succulents to add as an extra dimension to your collection.

TO CLEAN up your plants growing area.

CAMELLIAS

E. C.(Gene) Snooks

NOW IS THE TIME

TO FEED with a 2-10-10 fertilizer to promote larger and better blooms.

TO CONTINUE disbudding.

TO PICK up all old bloom to prevent petal blight.

TO SELECT new plants while in bloom.

TO TREAT some blooms with gibberellic acid for larger and earlier blooms.

TO MAINTAIN a regular spray program as needed. Watch for mites and looper worms.

TO KEEP a regular watering schedule, never let a plant dry out - maintain an even moist condition.

TO MAINTAIN humidity - mist in later afternoon on dry hot days.

TO KEEP from burning leaves.

DAHLIAS

Abe Janzen

NOW IS THE TIME

TO WITHHOLD water and fertilizer to let the plants go dormant.

TO ALLOW plants to dry - when brown about 12 inches from ground, cut off the stalk.

TO LEAVE tubers in the ground to harden off if there is good drainage. Otherwise lift roots before the heavy rains.

TO WASH clumps after digging, let dry a few hours before storing. If dividing tubers, treat cut area with soil sulphur, store in vermiculite, sand or other medium. Store out of the weather. Be sure tubers are tagged before storing.

EPIPHYLLUMS

Epiphyllum Society

NOW IS THE TIME

TO WITHHOLD fertilizer, especially those with nitrogen. Allow the plants to become semi-dormant.

TO WATER sparingly, but do not allow plants to dry out completely.

TO PROTECT plants from exposure to the elements. Frost, hail and strong winds can cause irreversible damage. Over exposure to harsh winter sunlight can be as detrimental as hot summer sun.

TO TIE or stake long branches so they will not breach when winds and rain arrive.

TO CHECK for snails and slugs; a few granules of "Sluggeta" at the base of the plant are often effective and leave little to no residue.

TO MAINTAIN good grooming - prune out dead, unsightly and non-productive branches to conserve the plant energy.

FERNS

Ray Sodomka

NOW IS THE TIME

TO CHECK containers to ensure planting mix has not completely broken down; add more mix to containers that need it.

TO BE alert for insects. Slugs and snails are very active.

TO WATER if it does not rain. Check plants not reached by rain.

TO APPLY a weak fertilizer solution once more before the December rest period.

TO PLANT spores and keep in a warm area.

TO CLEAN out weeds, oxalis and debris from pots.

TO PROTECT plants at night in frost areas. Cover with newspaper or old sheets or place in garage.

FUCHSIAS

William Selby

NOW IS THE TIME

TO ALLOW plants to rest; reduce or stop fertilizing.

TO DO heavy pruning in mild areas or in a greenhouse. Can make cuttings if a good tip available.

TO CLEAN up. Remove all dead leaves, blossoms and debris from pots and baskets and around plants in the ground.

TO WATCH for insects, molds and fungus in warmer areas.

TO MULCH plants left outside in areas where there is danger of frost; move baskets under cover for protection.

GERANIUMS (Pelargoniums)

Carol Roller

NOW IS THE TIME

TO WATER thoroughly when plants become somewhat dry. Watering will be necessary less often than in the warmer season. Allow the excess water to drain away. Keep foliage as dry as possible.

TO CONTINUE feeding with a balanced fertilizer dissolved in water, using less than the recommended strength. Apply as often as necessary to avoid nutritional deficiencies. Long term pellets may be used.

TO CONTINUE a pest control and disease prevention, using all products according to the manufacturer's direction.

TO PRUNE plants which have not been cut back. At least one green leaf should be left on each stem of regals, scenteds and similar types Lanky plants which were pruned earlier can be cut back again to produce more compact plants.

TO MAKE cuttings from the pruning. Shelter cuttings from extreme weather.

TO PINCH plants which were pruned earlier in the season.

TO GIVE plants temporary shelter from freezing if temperatures fall too low.

TO ROTATE plants on a regular basis in order to keep well-shaped.

IRIS

Iris Society

NOW IS THE TIME

TO CLEAN beds of dead leaves and weeds; aphids winter-over in debris filled areas.

TO SPRAY for aphids or give a light feeding of a systemic to control all sucking plant pests.

TO MAKE a final planting of bearded types, spurias, Louisianas and Siberians.

TO PLANT bulbous type iris - Dutch, English and Spanish for spring bloom.

TO MOVE and replant Pacific Coast natives in late December when the little white roots are showing. Water well until they are established.

ORCHIDS

Charles Fouquette

NOW IS THE TIME

TO FEED a dilute solution of 30-10-10 fertilizer to intergenetic Oncidium hybrids, Brassidiums, Miltonias if they are planted in bark. If they are grown in any other medium, feed a solution of 18-18-18. (The numbers reflect a guideline, not hard and fast numbers.)

TO FEED Cymbidiums a 30-20-20 fertilizer or similar. Stake new spikes - do not rotate plants. Protect buds and flowers from hail, rain or sun damage.

TO REPOT Cattleyas if new growth is outside of the pot and the plant is in active growth. (Otherwise, wait until spring.) Feed an 18-18-18 fertilizer, or similar, during the winter and only third watering.

TO CLEAN up old leaves, flowers, and other "trash" in growing areas. Remove shadecloth to give as much light as possible to the common growing areas. Clean the swamp cooler; drain the water out of the bottom; protect the motor by wrapping it with a plastic trash bag after you have oiled it and check the belts and cords. (Do this to any electrical or mechanical device you will not use for a while.)

TO LET deciduous Dendrobiums go dormant. Stop feeding when leaves start to drop.

TO WATER just enough to maintain root moisture. (Start to fertilize and water normally next spring when buds have swollen and are starting to develop and plant is starting active growth.)

TO HAVE Phalaenopsis well on their way to flowering at this time. Increase light to about 1500 footcandles. Try to duplicate the weather in the area where the Phals are native. Maintain air movement at all times.

ROSES

Richard Streeper

NOW IS THE TIME

TO WITHHOLD water to induce dormancy.

TO AVOID fertilization.

TO PREPARE new rose beds for January planting.

TO REMOVE plants which will be replaced at bareroot planting time.

TO BEGIN mid-winter pruning of floribundas (mid-December).

NATIVES

Jeanine De Hart

NOW IS THE TIME

TO BEGIN planting the natives while the weather is cool and the days shorter.

TO LIGHTLY feed the plants that have been in the ground since last year. While it's true that the natives grow in the wild with no additional additives, most of our homes are built on fill that contains next to nothing in the way of nutrients.

TO NOTE places in your yard that hold the water. These are areas where you want to avoid planting *Arctostaphylos*, *Ceanothus*, *Fremontodendron* and other water sensitive species. If your entire yard is poorly drained, you may wish to build up mounds to plant on.

TO REMEMBER to keep the hummingbird feeders full as where there are natives, there will be more of these little jewels.

GREEN THUMB

Penny Bunker

NOW IS THE TIME

TO FEED bird-of-paradise. Cut out dead growth from clumps to improve appearance.

TO CUT mums to within a few inches of the ground after blooming.

TO PLANT bulbs for spring blooms - daffodils, narcissus, ranunculus, anemones, scillas, callas, tulips and hyacinths.

TO PRUNE and shape holly and pyrancantha when cutting berries for holiday decorations.

TO APPLY dormant spray in December to control pests and disease next year; to use snail and slug bait regularly.

TO PREPARE and enrich your soil, preparing now for the bareroot planting of roses, trees, etc. in late December and January.

FRUIT TREES AND VINES
Vincent Lazaneo

NOW IS THE TIME

TO PRUNE deciduous trees and vines after their foliage has dropped. Wait until early spring to prune evergreens.

TO SPRAY dormant deciduous trees and vines with horticultural oil to kill scale, insects, spider mites and other overwintering pests.

TO SPRAY peach and nectarine trees with a fungicide such as lime sulfur (calcium polysulfide) to control leaf curl.

TO ORDER bare root trees and vines to plant in December or January.

TO PROVIDE frost protection for young citrus and other subtropical fruit trees.

VEGETABLES
Vincent Lazaneo

NOW IS THE TIME

TO REMOVE and compost warm-season vegetables to prevent pests and diseases from overwintering on them.

TO CONTINUE planting cool-season vegetables which will not be subject to frost injury.

TO PLANT seeds of short-day onions, such as 'Grano', 'Granex', or 'Crystal Wax', and garlic cloves in November for bulbs next summer.

TO PLANT dormant crowns of artichoke, asparagus, and rhubarb. To avoid crown rot of rhubarb, plant crowns in containers filled with porous potting soil and transplant into garden where drainage is good after several leaves have developed.

The Story of Rhubarb

(Continued from page 173)

HOW TO STORE

Rhubarb can be stored fresh in a refrigerator by placing it in a closed plastic bag for up to one week. To prepare, remove stored rhubarb from refrigerator and soak stalks in cold water for approximately twenty minutes. The soaking will bring back resiliency to the stalk. After soaking, remove stalks from cold water and trim off and discard any leaves, then wash and trim the stalks. Cut the remaining stalks in pieces as directed for use in your favorite recipe.

For freezing, use a sharp knife and cut stalks into small pieces and place in freezer bag(s). Frozen rhubarb should keep well and maintain its flavor for approximately six months. When needed, defrost and soak cut pieces in cold water for about ten minutes and use as directed in your favorite recipe. □

CHUCK MCGILL, with degrees in finance and business, worked for twenty-six years for Fortune 500 companies. Since 1985 he has been the owner of a consulting company and CMA Farms in Escondido and the Carolinas.

POINSETTIA HISTORY

The poinsettia, called *Cuetlaxochitle*, was known by the ancient Aztecs of Central Mexico. It was a symbol of purity. The bracts were used for a reddish-purple dye and the latex was used for a fever medicine. It was highly prized by kings Montezuma and Neetzahualcoyotl, but because of the high altitude it could not grow in their capital (present day Mexico City). It was cultivated in a limited region near present day Taxco.

From 1825-29, Joel Poinsett, a southern plantation owner and botanist, was appointed the first United States Ambassador to Mexico. On a visit to Taxco in December he found this blooming red flower. He sent plants to his home in Greenville, South Carolina. They flourished in his greenhouse and he distributed plants to his horticulture friends. Although it is known by his name, the botanical name *Euphorbia pulcherrima* was given to the plant by a German taxonomist in 1833. □

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AFFILIATES: Send changes to: Lynn Beyerle, Affiliates Editor *California Garden*, Casa del Prado, Room 105, Balboa Park, San Diego CA 92101-1619. Call 232-5762. Deadline for Jan-Feb issue: Nov 15, 1993.

CHRISTMAS ON THE PRADO

For 16 years San Diego Floral has created a holiday flower show for the Christmas on the Prado celebration which will be held on December 3—4, 1993. Trees decorated with live flowers by the affiliates are a specialty of this show.

Rose Society

(Photographs by Bill and Jo Rathmann)

Orchid Society

Book Reviews

WATER-WISE VEGETABLES; FOR THE MARITIME NORTHWEST GARDENER

Steve Solomon

Seattle, Sasquatch Books, 1933, 93 pages, 8 color photos, 5½" x 8½", softcover, $8.95

At first sight this book appears to be less than useful in Southern California, since the author strongly emphasizes that he is concentrating on the Maritime Northwest. A look at the text shows that his help and advice and the benefit of his extensive expertise can be useful in other areas, particularly in arid conditions. The key is to relate his data on climates in the Northwest to other regions where water conservation is of prime importance. Clearly the techniques he discusses have been very successful. He includes some excellent color photographs as proof. This is not a book for the weekend gardener who is working with limited time and in a relatively small space.

Steve Solomon lists an impressive number and variety of vegetables, and he backs his information with a useful bibliography and a list of seed suppliers. This is a book for serious vegetable growers working in a dry climate. It is a helpful reference tool with a wealth of detail presented in an easy-to-handle style and with strict practicality.

Reviewed by Elsie Topham

THE NATURALIST'S GARDEN, HOW TO GARDEN WITH PLANTS THAT ATTRACT BIRDS, BUTTERFLIES AND OTHER WILDLIFE

Ruth Shaw Ernst

Old Saybrook, Conn., The Globe Pequot Press, 1993, 288 pages, 55 black and white illustrations, 7" x 10", softcover, $15.95.

For those interested in attracting birds, butterflies, and beneficial insects to a home garden, this book provides very good suggestions for maintaining the garden after it is established.

The chapter on wildflowers gives useful information on basic plant needs, what wildlife is attracted, and which USDA zone(s) are suitable. The section on vegetables has good information on integrated pest management and biological controls, by incorporating the beneficial role of nature. Water saving methods are discussed, as well as the procedures of xeriscape.

The information on birds lists many common species, as well as the favorite kinds of seeds, and detailed dimensions for appropriate birdhouses. The chapter on butterflies lists many species of butterflies and moths as well as the nectar and larval food sources needed.

The resources section of the book is extensive. The bibliography lists several books applicable to each chapter and the index shows plants cross-referenced by botanical and common name.

In this book, the finely detailed line drawings of the illustrator, combined with a very readable text by the author, the view is expressed that in your naturalist's garden, you should balance the scope of your project to provide time to relax, observe, and enjoy the fruits of your labor. *The Naturalist's Garden* is an informative, useful book that would be an asset to any gardener's bookshelf.

Reviewed by Dorcus Utter

BEAUTIFUL EASY GARDENS, A WEEK-BY-WEEK GUIDE TO PLANTING, HARVESTING, AND ENJOYING TEN GREAT GARDENS

Laurence Sombke

Old Saybrook, Conn., The Globe Pequot Press, 1993, 240 pages, 20 line drawings, 7" x 10", softcover, $15.95

This book is written in a non-technical style with basic information on soil preparation, composting, mulching, and proper watering methods for a variety of small garden plans. Most of the gardens discussed are 10 feet by 15 feet in size.

Eight of the gardens are for growing food, and two are for growing flowers. Most chapters contain recipes applicable to the subject: such as, salad garden, herb garden, and edible landscape garden. The recipes look interesting and there are also lists of the addresses for seed and plant catalogs appropriate for each subject.

An introductory chapter has a detailed ten-point environmental pest control program recommending the use of disease-resistant varieties of plants and pest control methods without the use of chemicals.

In this book, *Beautiful Easy Gardens*, the individual garden plots are set up on a periodic time table of twenty-four to twenty-seven weeks or of four seasons. However, the book is oriented to a much colder climate than Southern California, and the schedules are inappropriate for this area.

Reviewed by Dorcus Utter

PERFORMANCE PLANTS

Andrew Lawson

New York, Penguin, USA, Inc. 1993, 168 pages, 226 color photos, 8¾" x 8¾", softcover, $17.00.

This book is such a visual delight; the photographs so well-staged and compelling that they really enhance the written text.

The main purpose of a lasting display is to be able to take a short vacation and not miss a short-term blooming altogether while you're away. This helpful book includes mosses, grasses, leaves, fruits, and bark, plus the flowers you select. To choose compatible plants for a lasting display requires a knowledge of plant heights, widths, leaf texture and the heart of a true colorist.

English gardens are pictured here but the book has ample information to plant your own landscaped garden using plants native to America, to achieve a similar result.

You'll find this book pleasing and it perhaps will motivate you to work with some of these plants.

Reviewed by Jo Rathman

PURPLELEAF PLUMS

Arthur Lee Jacobson

Portland, Oregon, Timber Press, Inc., 1992, 195 pages, 40 color photos, 10 black and white illustrations, 6" x 9", hardcover, $27.95.

This book is no doubt the most extensive collection of detailed information available on the subject of purpleleaf plums. The reader is made well aware that a purpleleaf plum is not just "a purpleleaf plum." The fifty cultivars discussed range in size from small shrubs to forty foot trees. The author has done an extensive amount of research, both from literary sources and by actual on-site observations.

A section on the origin and history shows the purpleleaf plum originating in Asia Minor in the seventeenth century. Western cultivation began in 1880 when the cultivar *Prunus cerasifera* 'Pissardii', the "mother" of all purpleleaf plums was exported from the Persian shah's garden, near Tabriz. Table 1 lists the fifty cultivars according to date and place of origin. The author discusses the history, cultivation, special landscape roles and classification of the fifty purpleleaf plum cutivars by comparison of flowers, fruit, foliage, tree shape, hardiness, propagation procedures, landscape uses and plant availability.

Part II of the book gives a rather detailed description of each of the fifty cultivars cited. Both the favorable and unfavorable characteristics are given, as well as information on which cultivars have edible fruit and which have fruit suitable for wildlife. Chapter 3 groups the plants by the merits of their flowers, listing thirty-two cultivars with petals white or a hint of pink and eighteen with petals clearly pink, as well as indicating bloom time, fragrance and size. Chapter 4 gives the merits of foliage by leaf color, size, shape and texture. The purpleleaf plum is deciduous and the plants retain leaf color better in full sun.

Interestingly, the author includes a listing of several unrelated species of normally green-leaved trees whose cultivars may sport purple leaves. Also, he notes that no wild tree population is purple and every cultivated purpleleaf tree originated as a sport of a greenleaf tree. Appendix I gives thumbnail summaries of the forty purpleleaf plum cultivars.

Appendix II lists scientific and common names; thirty have scientific binomials (genus/species names) and twenty are without specific designations. The book has a fine glossary and the index is uniquely divided into: People Index, Nursery Index, Subject Index, and Species and Variety Index. This book would be an excellent reference book to use when selecting a purpleleaf plum for use in landscape design. It is an easily read book with an occasional infusion of wry humor and a compilation of all one ever needs to know about purpleleaf plums.

Reviewed by Dorcus Utter

GARDEN WRITING FOR NEWSLETTERS AND MAGAZINES

Bob Gordon

Rialto, Laid-Back Publications, 1992, 57 pages, 8½" x 11", softcover, $8.95

To inspire us, the author suggests that, individually, we may have information that no one else in the world knows. He tells us we should put this knowledge in writing for the sake of posterity.

While directed to those interested in garden subjects, the book could be used as a guide to any nonfiction writing. Some of his steps leading to the writing process are: defining the problem to be solved, selecting a solution, deciding on the potential reader's level of understanding, and deciding on a writing style.

I felt Mr. Gordon discussed the mechanics of writing well and succinctly. He lists a few helpful books and sixteen points on writing, quoted from Ray Bradbury. In a few instances he hyphenates words unnecessarily. I found this ex-treme-ly an-noy-ing.

This book is in our library's reference section; and, as a novice writer, I feel it would be worthwhile to have my own copy.

Reviewed by Jacqueline Coleman

SDFA BUS TOUR
DECEMBER 14, 1993
MISSION INN
RIVERSIDE BOTANIC GARDEN

QUESTION: What is historic, a gala celebration of Christmas and a California tradition?

ANSWER: The Mission Inn in Riverside which has been lovingly restored to its Victorian elegance and once again welcomes visitors.

San Diego Floral invites you to join us on Tuesday, December 14 as we journey north for a festive pre-Christmas visit and tour of this gracious facility. The holiday decorations will be in place and the guides will escort us through all the nooks and corners of this splendid hotel.

To make the day complete, we start with a tour of the Botanic Garden at the University of California at Riverside campus. We will enjoy a special catered lunch there. The afternoon will be spent at the Mission Inn.

BUS TRIP - DEC. 14, 1993
MISSION INN - RIVERSIDE
Lunch is included

☐ $42.00 Members (who pay dues to SDFA)
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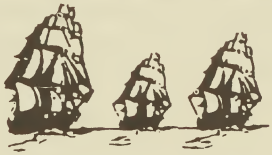

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In Holland sightseeing will include a tour of 8 miles of Tulip Lanes and a visit to Veldheer Gardens where 2 million tulips will be in bloom. You will visit the famous city garden, the historic working windmill, the wooden shoe factory, the restored Dutch Village, and the Kollen Park Tulip Time Festival show.

Enroute to St. Joseph, from your reserved seats you will enjoy the Blossomtime parade of over 100 floats decorated with fruit tree blossoms. In the St. Joseph area you will visit a 105 acre botanic garden, the famous Victorian Garden, the Antique Orchard with over 200 historic trees, a winery, and fascinating Herb Barn.

This is a once-in-a lifetime chance to visit this picturesque area and take part in their colorful festivities. Many more things are included in this special tour. The price includes hotels, 5 dinners, 4 breakfasts, 1 lunch, and admission to all events. Special arrangements are being made for the requirements of older travelers. Many horticultural extras, not included on regular tours, will make this a truly memorable event. Bring your camera.

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POINT LOMA GARDEN CLUB

COMMUNITY SERVICE HAS always been the focus of the Point Loma Garden Club. It was founded in 1961 as a section of the "Welcome Wagon" newcomers' club, and joined the Palomar District in 1969. One hundred thirteen men and women members actively support the many community outreach programs that have existed in the club almost from its inception.

Four ongoing projects give the club seasonal and long range focus. One that started twenty-seven years ago is the weekly contribution of a plant or flower arrangement to the Point Loma Library. The second longest continuing project is the annual decoration of the Point Loma Lighthouse at Cabrillo National Monument for the Christmas season. The decorating takes place during the second week of December and is open for viewing until after New Year's Day. The third project is an active garden therapy program. Members work with shut-ins and patients at Children's Hospital once a month all year to brighten their lives working with plant materials.

The fourth project is contributing to the development of the Point Loma Native Plant Preserve. It is located on the corner of Mendocino and Green streets, on city land adjacent to Collier Park West. At one time the city had other uses in mind for the property, but through the efforts of the garden club it became a native plant preserve dedicated to educating the public. It consists of four acres of native plants with walkways. Plants are labeled. Club members have led docent tours of the garden for interested groups.

The club has used their participation in this project as a theme for artistic expression within the club. An artist-member uses a native plant represented in the preserve as a model for the cover of notecards sold by the club. They participate in the Penny Pines program that supports reforestation of Cleveland National Forest. They recently made a donation to the Cuyamaca College Horticultural Department. The club is proud that their member is the Palomar District president this year and that five members are on the board.

Their annual fundraiser is a Rummage, Plant and Bake Sale that takes place in October. Proceeds from the sale benefit the Native Plant Preserve.

The club meets at the Westminster Presbyterian Church on the second Wednesday of the month from 10:00 a.m. to noon. The typical schedule is a morning speaker, noon luncheon and afternoon workshop. President Marilyn Cross invites all those interested in attending meetings to call her in advance at 226-6441.□

SAN DIEGO COUNTY HERB SOCIETY

BURGEONING INTEREST IN herbs has resulted in the largest membership in the San Diego County Herb Society since its founding in 1972. At that time eight women met at an Escondido home to form an auxiliary unit of the Herb Society of America, Los Angeles Chapter. Four years later the group decided that it was too far to go to Los Angeles for events. Thus the San Diego County Herb Society formed in 1976 and now has sixty members.

The club's goals are to educate the public, and share their interest in growing and propagating herbs. They explore the culinary uses of herbs as well as their ornamental use in the landscape. Craft projects using herbs such as pressed herbs, notecards and wreaths can be the subject of their meetings. How to plan for scenting the garden with herbs has been the topic during past meetings. They discuss herb gardening for large gardens to pot gardens.

The group has two major projects during the year. The first is active booth participation in the Quail Sale at Quail Botanical Gardens held in October. The second is booth participation in the May Festival at Rainbow Gardens. These projects help to provide funds for the club's major community service project, an herb demonstration garden within the Quail Botanical Garden. This herb plot has existed at the Garden for over eight years. It is presently being relocated within the Garden and redeveloped. The herb garden will be maintained by members, with plants donated by member commercial growers. Plans include wheelchair access and a feel, touch and smell section for the blind and low vision public.

President Kathleen Delancey (746-5038) invites those that are interested in the club to call her. They meet on the third Saturday of the month from September to June in member's homes. Meetings consist of a morning speaker or member sharing at 10:00 a.m. and an optional sack lunch.□

SUSAN FOX interviews the presidents of the clubs and societies for information on their organizations for this feature. Because of the activities of these organizations, many of the best horticultural features are developed and maintained.

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COMPILED BY JOHN J. GAGLIARDI

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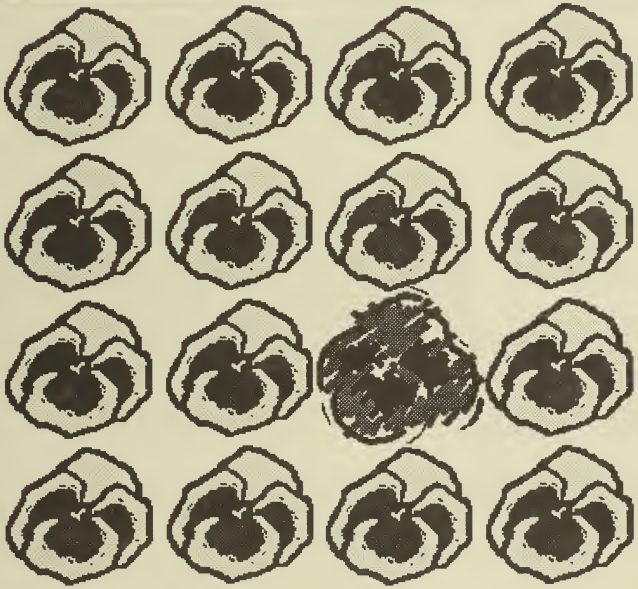

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